

WE CLAIM:

1. A method for applying an elastomeric gasket to a part having a channel extending into a face thereof for receiving and at least frictionally engaging said gasket, said method comprising the steps of:
 - i) obtaining a gasket carrier having a convexly curved surface with a groove for receiving a base of said gasket, said groove being registerable with said channel;
 - ii) placing said base of said gasket in said groove;
 - iii) juxtaposing said face of said part and said gasket carrier with said gasket aligned with said channel;
 - iv) moving said part and said gasket carrier toward each other for a portion of said gasket to enter said channel;
 - v) causing a relative rocking movement between said part and said gasket carrier to transfer a remainder of said gasket to said channel; and,
 - vi) separating said part and said gasket carrier.
- 15 2. A method according to claim 1 wherein:
 - in step iv), said part is held stationary and said curved surface of said gasket carrier is moved toward said part; and,
 - in step v), said part is held stationary and said relative rocking movement is carried out by said gasket carrier.
- 20 3. A method according to claim 1 wherein:
 - in step iv), said curved surface of said gasket carrier is held stationary and said part is moved toward said curved surface; and,
 - in step v), said curved surface is held stationary and said relative rocking movement is applied to said part.
- 25 4. A method according to claim 1 wherein:
 - in step iv), said part is held stationary and said curved surface of said gasket carrier is moved toward said part; and,
 - in step v), said curved surface is held stationary and said relative rocking movement is carried out by said gasket carrier.

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5. An apparatus for applying an elastomeric gasket to a part having a channel extending into a face thereof for receiving and at least frictionally engaging said gasket, said apparatus comprising:

a gasket carrier having a convexly curved surface with a groove therein for receiving a base of said gasket;

5 said groove registering with said channel to feed said gasket into said channel in response to relative rocking movement between said part and said surface.

6. An apparatus as claimed in claim 5 further comprising:

a part holder for grasping said part and presenting said channel to said gasket carrier.

7. An apparatus as claimed in claim 6 further comprising:

10 a driver operably connected to at least one of said part holder and said gasket carrier for effecting said relative rocking movement.

8. An apparatus according to claim 7 wherein:

said driver is connected to said gasket carrier.

9. An apparatus according to claim 5 wherein:

15 said driver is connected to said part holder.

10. An apparatus according to claim 8 wherein said part holder includes:

an opening for receiving said part;

an inwardly extending flange extending at least part way around said opening for abutting against said face outboard of said channel to support said part within mid opening;

20 and,

at least one clamp member moveable between a load position allowing placement and removal of said part within said opening and a hold position engaging said part to hold said part within said opening and against said flange.

11. An apparatus as claimed in claim 10 wherein said driver further comprises:

25 a platen moveable in a longitudinal direction toward and away from said part holder;

a base plate rockingly coupled to said platen for supporting said gasket carrier;

a connector for connecting said gasket carrier to said base plate;

first positioning means connected to said platen for moving said platen in said longitudinal direction; and,

a rocker acting between said base plate and said platen for causing said base plate and in turn said gasket carrier to effect said rocking movement relative to said part holder.

12. An apparatus as claimed in claim 11 wherein said rocker further comprises:

first and second cam plates extending from said platen respectively toward first and second ends thereof;

5 said first and second cam plates having respective first and second cam surfaces engaged by respective first and second cam followers connected to said base plate;

said first and second cam surfaces being profiled to allow opposite relative longitudinal movement of said first and second ends of said base plate while restraining lateral movement thereof;

10 an arched guide secured to and extending laterally across said base plate, said arched guide having a curvature complementary to said curved surface; and,

a slider slidable along said guide by a slider positioning means acting between said slider and said platen, to laterally position said slider relative to said guide, said slider acting in conjunction with said first and second cam plates and said first and second cam followers

15 to translate lateral movement of said slider to said rocking movement of said gasket carrier.

13. An apparatus as claimed in claim 12 wherein:

said gasket carrier is slidably connected to said base plate for lateral movement relative to said part holder; and,

20 said apparatus further includes a second positioning means acting between said platen and said base plate to laterally slide said platen clear of said part holder for placement of said gasket in said groove.

14. An apparatus as claimed in claim 13 wherein:

said first, second and slider positioning means are fluid pressure responsive cylinders.

15. An apparatus as claimed in claim 8 wherein said driver further comprises:

25 a platen moveable in a longitudinal direction toward and away from said part holder;

a base plate rockingly coupled to said platen for supporting said gasket carrier;

a connector for connecting said gasket carrier to said base plate;

first positioning means connected to said platen for moving said platen in said longitudinal direction; and,

a rocker acting between said base plate and said platen for causing said base plate and in turn said gasket carrier to effect said rocking movement relative to said part holder.

16. An apparatus as claimed in claim 15 wherein said rocker further comprises:

first and second cam plates extending from said platen respectively toward first and second ends thereof;

5 said first and second cam plates having respective first and second cam surfaces engaged by respective first and second cam followers connected to said base plate;

said first and second cam surfaces being profiled to allow opposite relative longitudinal movement to said first and second ends of said base plate while restraining lateral movement thereof;

10 an arched guide secured to and extending laterally across said base plate, said arched guide having a curvature complementary to said curved surface; and,

a slider slidable along said guide by a slider positioning means acting between said slider and said platen, to laterally position said slider relative to said guide, said slider acting in conjunction with said first and second cam plates and said first and second cam followers

15 to translate lateral movement of said slider to said rocking movement of said gasket carrier.

17 An apparatus as claimed in claim 16 wherein:

said gasket carrier is slidably connected to said base plate for lateral movement relative to said part holder; and,

said apparatus further includes a second positioning means acting between said platen

20 and said base plate to laterally slide said platen clear of said part holder for placement of said gasket in said groove.

18. An apparatus as claimed in claim 17 wherein:

said first, second and slider positioning means are fluid pressure responsive cylinders.

19. An apparatus as claimed in claim 17 wherein:

25 said first, second and slider positioning means are pneumatic cylinders.

20. An apparatus as claimed in claim 13 wherein:

said first, second and slider positioning means are pneumatic cylinders.